West Virginia Department of Environmental Protection
Division of Air Quality

Title V Operating Permit Revision

Jim Justice
Governor

Austin Caperton
Cabinet Secretary

For Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Action Number: MM01 **SIC:** 4922
Name of Permittee: Equitrans, L.P.
Facility Name/Location: Burnsville #71 Compressor Station
County: Braxton
Facility Address: P.O. Box 191, Burnsville, WV 26335

Description of Permit Revision: This modification incorporates the requirements approved under R13-3252 to replace the flare tip on the existing flare with a John Zink EEF-500 flare pilot to meet the design criteria specified in 40CFR§60.18(b).

Title V Permit Information:

Permit Number: R30-00700006-2013
Issued Date: February 4, 2013
Effective Date: February 18, 2013
Expiration Date: February 4, 2018

Directions To Facility: From Charleston, take Interstate 79 North to the Burnsville Exit. Go to the Exxon station and turn left. Turn left at the next intersection. Stay on this road, as it passes the grade school and goes under the interstate.

THIS PERMIT REVISION IS ISSUED IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL ACT (W.VA. CODE §§ 22-5-1 ET SEQ.) AND 45CSR30 - "REQUIREMENTS FOR OPERATING PERMITS." THE PERMITTEE IDENTIFIED AT THE FACILITY ABOVE IS AUTHORIZED TO OPERATE THE STATIONARY SOURCES OF AIR POLLUTANTS IDENTIFIED HEREIN IN ACCORDANCE WITH ALL TERMS AND CONDITIONS OF THIS PERMIT.

William F. Durham
Director

January 30, 2017
Date Issued

Permit Number: **R30-00700006-2013**
Permittee: **Equitrans, L.P.**
Facility Name: **Burnsville #71 Compressor Station**
Permittee Mailing Address: **P.O. Box 191 Burnsville, WV 26335**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Burnsville, Braxton County, West Virginia
Facility Mailing Address:	P.O. Box 191, Burnsville, WV 26335
Telephone Number:	(304) 853-2736
Type of Business Entity:	Corporation
Facility Description:	Natural gas production and transmission facility
SIC Codes:	Primary: 4922; Secondary: None; Tertiary: None
UTM Coordinates:	529.40 km Easting • 4,301.40 km Northing • Zone 17

Permit Writer: Robert Mullins

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Engines					
C-001	C-001	Reciprocating Engine/Integral Compressor Superior 66-825 Serial No. 300339	1984	600 HP	None
C-002	C-002	Reciprocating Engine/Integral Compressor Cooper Bessemer GMVH Serial No. 48957	1984	1350 HP	None
C-003	C-003	Reciprocating Engine/Integral Compressor Cooper Bessemer GMVH Serial No. 48958	1984	1350 HP	None
G-001	G-001	Reciprocating Engine/Generator Cummins GTA-743 Serial No. 25125199	1984	251 Hp	None
Dehydrator					
TEG	FLARE	TEG Dehydrator	1984	34.0 MMCFD	FLARE
Boilers					
BLR	BLR	Heating Boiler	1984	1.25 MMBtu/hr	None
DEHY	DEHY	Dehydration Boiler	1984	0.025 MMcf/day	None
Flare					
FLARE	FLARE	Dehydration Flare John Zink; EEF-U-4 Model: 320-2 Efficiency: 95 % Destruction Efficiency	~~1984~~ 2014	1.02 MMBtu/hr 50,000 Btu/hr(Pilot)	None
Tanks					
Tank 1	Tank 1	Tank containing waste fluid	1993	10,000 gallon	None
Tank 2	Tank 2	Tank containing lube oil	1993	12,000 gallon	None
Tank 3	Tank 3	Tank containing Triethylene Glycol	1993	3,000 gallon	None
Tank 4	Tank 4	Tank containing Ethylene Glycol	1993	3,000 gallon	None
Tank 5	Tank 5	Tank containing Scrubber Oil	1993	2,000 gallon	None
Tank 6	Tank 6	Tank containing Maintenance Oil	1993	1,000 gallon	None

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
~~N/A~~ R13-3252	August 8, 2016

2.0 General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	**NSPS**	New Source Performance Standards
CBI	Confidential Business Information	**PM**	Particulate Matter
CEM	Continuous Emission Monitor	**PM_{10}**	Particulate Matter less than 10μm in diameter
CES	Certified Emission Statement	**pph**	Pounds per Hour
C.F.R. *or* CFR	Code of Federal Regulations	**ppm**	Parts per Million
CO	Carbon Monoxide	**PSD**	Prevention of Significant Deterioration
C.S.R. *or* CSR	Codes of State Rules	**psi**	Pounds per Square Inch
DAQ	Division of Air Quality	**SIC**	Standard Industrial Classification
DEP	Department of Environmental Protection	**SIP**	State Implementation Plan
FOIA	Freedom of Information Act	**SO_2**	Sulfur Dioxide
HAP	Hazardous Air Pollutant	**TAP**	Toxic Air Pollutant
HON	Hazardous Organic NESHAP	**TPY**	Tons per Year
HP	Horsepower	**TRS**	Total Reduced Sulfur
lbs/hr *or* lb/hr	Pounds per Hour	**TSP**	Total Suspended Particulate
LDAR	Leak Detection and Repair	**USEPA**	United States Environmental Protection Agency
m	Thousand	**UTM**	Universal Transverse Mercator
MACT	Maximum Achievable Control Technology	**VEE**	Visual Emissions Evaluation
mm	Million	**VOC**	Volatile Organic Compounds
mmBtu/hr	Million British Thermal Units per Hour		
$mmft^3$/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour		
NA *or* N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.
[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as “State-enforceable only” shall become “Federally-enforceable” requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA. **[45CSR§30-5.1.a.2.]**

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. **[45CSR§6-3.2.]**

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them. **[40 C.F.R. §61.145(b) and 45CSR34]**

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. **[45CSR§4-3.1 State-Enforceable only.]**

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11. **[45CSR§11-5.2]**

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. **[W.Va. Code § 22-5-4(a)(14)]**

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R 68]

3.1.9. No person shall cause, suffer, allow or permit fugitive particulate matter to be discharged beyond the boundary lines of the property on which the discharge originates or at any public or residential location, which causes or contributes to statutory air pollution.
[45CSR§17-3.1]

3.2. Monitoring Requirements

3.2.1. *Reserved*

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.; 45CSR13, R13-3252, 4.4.1]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified

in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

45CSR21	Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds. Burnsville #71 station is not located in Cabell, Kanawha, Putnam, Wayne, or Wood counties that are affected by 45CSR21.
45CSR27	To Prevent and Control the Emissions of Toxic Air Pollutants. Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment "used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight."
40 C.F.R 60 Subpart Dc	This subpart applies to steam generating units greater than 10 MMBtu/hr and less than 100 MMBtu/hr. Burnsville #71 Compressor Station does not have any steam generating units greater than 10 MMBtu/hr.
40 C.F.R. 60 Subpart GG	Standards of Performance for Stationary Gas Turbines. There are no turbines at the Burnsville #71 Compressor Station.
40 C.F.R. 60 Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. All tanks are below 40,000 gallons in capacity.
40 C.F.R. 60 Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984. All tanks are below 40,000 gallons in capacity.
40 C.F.R. 60 Subpart Kb	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. All tanks are below 75 m^3 in capacity.
40 C.F.R. 60 Subpart KKK	Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants. Burnsville #71 Compressor Station is not engaged in the extraction of natural gas from field gas or in the fractionation of mixed natural gas liquids to natural gas products.
40 C.F.R. 60 Subpart LLL	Standards of Performance for Onshore Natural Gas Processing: SO_2 Emissions. There are no sweetening units at the Burnsville #71 Compressor Station.
40 C.F.R. 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Engines. All engines at Burnsville #71 Compressor Station are spark ignition engines.
40 C.F.R. 60 Subpart JJJJ	This subpart applies to stationary spark ignition internal combustion engines that have been constructed, reconstructed, or modified after various dates, the earliest of which is June 12, 2006. All the engines at Burnsville #71 Compressor Station were installed before June 12, 2006 and have not been reconstructed or modified.
40 C.F.R. 60 Subpart KKKK	Standards of Performance for Stationary Combustion Turbines. There are no turbines at the Burnsville #71 Compressor Station.
40 C.F.R 63 Subpart HHH	National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. The Burnsville #71 Compressor Station is not subject to Subpart HHH since the Burnsville's gas custody transfer is at an extraction facility and not to a natural gas transmission facility.

40 C.F.R 63 Subpart DDDDD	This MACT standard applies to industrial, commercial, and institutional boilers and process heaters at major sources of HAPs. Burnsville #71 Compressor Station is not major for HAPS.
40 C.F.R. 63 Subpart JJJJJJ	This MACT standard applies to industrial, commercial, and institutional boilers at area sources of HAPs. All boilers at Burnsville #71 Compressor Station fire natural gas exclusively. Natural gas boilers are exempt from the rule per 40 C.F.R. §63.11195(e).

4.0 Source-Specific Requirements [Reciprocating Engine (C-001, C-002, C-003, and G-001) group and emission point ID (C-001, C-002, C-003, and G-001)]

4.1. Limitations and Standards

4.1.1. By October 19, 2013 the permittee must comply with the general provisions of 40 C.F.R. 63 as shown in Table 8 of 40 C.F.R. 63. Engines C-002, C-003, and G-001 are exempt from the following sections of the general provisions as per 40 C.F.R. § 63.6645(a)(5): 40 C.F.R. §§ 63.7(b) and (c), 40 C.F.R. §§ 63.8(e), (f)(4), and (f)(6), 40 C.F.R. §§63.9(b)-(e), (g) and (h).

[40 C.F.R. §63.6665, 40 C.F.R. §63.6595(a)(1), 40 C.F.R. §63.6645(a)(5), Table 8 of 40 C.F.R. 63 Subpart ZZZZ]

4.1.2. For existing Stationary RICE located at an area source of HAP emissions, the permittee must comply with the following requirements from Table 2d of 40 C.F.R. 63 Subpart ZZZZ by October 19, 2013.

a. Compressor engine C-001 is classified as a 4-stroke, rich burn, non-emergency, spark ignition (SI) unit with a rating of 600 hp at an area source of HAPs and as such is subject to the following requirements:

1. Limit the concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd at 15 percent O_2; or

2. Reduce formaldehyde emissions by 76 percent or more.

b. Compressor engines C-002 and C-003 are classified 2-stroke, lean-burn, non-emergency, SI units with a rating of 1,350 hp at an area source of HAPs and as such are subject to the following requirements:

1. Change the oil and filter every 4,320 hours of operation or annually, whichever comes first; and

2. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first; and

3. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.

c. Generator G-001 is classified as a 4-stroke, rich burn, non-emergency, SI unit less than 500 hp at an area source of HAPs and as such is subject to the following requirements:

1. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;

2. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and

3. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.

[40 C.F.R. §63.6603, 40 C.F.R. §63.6595(a), Table 2d of 40 C.F.R. 63 Subpart ZZZZ]

4.1.3. For engine C-001, the permittee shall comply with the following operating limitations in Table 1b of 40 C.F.R. 63 Subpart ZZZZ by October 19, 2013:

For each . . .	The permittee must meet the following operating limitation . . .
1. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O2 and using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd or less at 15 percent O2 and using NSCR.	a. Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and b. Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.
2. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O2 and not using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd or less at 15 percent O2 and not using NSCR.	Comply with any operating limitations approved by the Administrator.

[40 C.F.R. §63.6603, 40 C.F.R. §63.6595(a), Table 1b of 40 C.F.R. 63 Subpart ZZZZ]

4.1.4. The permittee must demonstrate continuous compliance with each emission limitation or operating limitation in Tables 1b and 2d of 40 C.F.R. 63 Subpart ZZZZ that apply according to the methods from Table 6 of C.F.R. 63 Subpart ZZZZ. Engines C-001, C-002, C-003, and G-001 are subject to the requirements of 40 C.F.R. §63.6605.

a. For the engines C-002, C-003, and G-001 the permittee shall demonstrate continuous compliance by:

1. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or

2. Develop and follow you own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

b. For engine C-001, the following methods shall be used to demonstrate continuous compliance with the requirement to reduce formaldehyde emissions, or to limit the concentration of formaldehyde in the stationary RICE exhaust:

1. If not using an oxidation catalyst or NSCR:

i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved or that your emissions remain at or below the formaldehyde concentration limit; and

ii. Collecting the approved operating parameter (if any) data according to 40 C.F.R. § 63.6625(b); and

iii. Reducing these data to 4-hour rolling averages; and

iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

2. If using an oxidation catalyst or NSCR:

i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved or that your emissions remain at or below the formaldehyde concentration limit; and

ii. Collecting the catalyst inlet temperature data according to 40 C.F.R. § 63.6625(b); and

iii. Reducing these data to 4-hour rolling averages; and

iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and

v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.

[40 C.F.R. §§ 63.6605, 63.6640(a), Table 6 of 40 C.F.R. 63 Subpart ZZZZ]

4.1.5. The permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop their own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
[40 C.F.R. §63.6625(e)] (C-002, C-003, G-001)

4.1.6. If the permittee operates a new, reconstructed, or existing stationary engine, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 C.F.R. Part 63, Subpart ZZZZ apply.
[40 C.F.R. §63.6625(h)](C-001, C-002, C-003, G-001)

4.2. Monitoring Requirements

4.2.1. The permittee must comply with the following applicable monitoring requirements of 40 C.F.R. 63 Subpart ZZZZ:

a. For engine C-001: 40 C.F.R. §§ 63.6625(a) and (b);

b. For engines C-002, C-003 and G-001: 40 C.F.R. § 63.6625(j).
[40 C.F.R. § 63.6625]

4.2.2. For engine C-001, the permittee shall monitor and collect data to demonstrate continuous compliance in accordance with 40 C.F.R. § 63.6635.
[40 C.F.R. §63.6635]

4.3. Testing Requirements

4.3.1. For engine C-001, the permittee must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 of 40 C.F.R. 63 Subpart ZZZZ that apply within 180 days after the compliance date that is specified in 40 C.F.R. §63.6595 and according to the provisions in 40 C.F.R. §63.7(a)(2).

Table 4 of 40 C.F.R. 63, Subpart ZZZZ

For each . . .	Complying with the requirement to . . .	The permitee must . . .	Using . . .	According to the following requirements . . .
2. 4SRB stationary RICE	a. Reduce formaldehyde emissions	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2 at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00m (2005)	(a) Measurements to determine O_2 concentration must be made at the same time as the measurements for formaldehyde concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348–03,‟provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A § 63.7(d)(1)(i)	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (2005)	(a) Measurements to determine O2concentration must be made at the same time and location as the measurements for formaldehyde concentration.

		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03,[c]provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. Measure CO at the exhaust of the stationary RICE	(1) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522-00 (2005),[a]Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03	(a) CO Concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour longer runs.

Table 5 of 40 C.F.R. 63, Subpart ZZZZ

For each . . .	Complying with the requirement to . . .	The permittee has demonstrated initial compliance if. . .
7. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Reduce formaldehyde emissions and using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
8. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Reduce formaldehyde emissions and not using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and ii. The permittee has installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. The permittee has recorded the approved operating parameters (if any) during the initial performance test.
9. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Limit the concentration of formaldehyde and not using NSCR	i. The average formaldehyde concentration determined from the initial performance test is less than or equal to the formaldehyde emission limitation; and
		ii. The permittee has installed a CPMS to continuously monitor operating parameters

		approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. The permittee has recorded the approved operating parameters (if any) during the initial performance test.
10. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
11. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. The permittee has installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. The permittee has recorded the approved operating parameters (if any) during the initial performance test.

a. The permittee is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the following conditions:

1. The test must have been conducted using the same methods specified in 40 C.F.R. 63, Subpart ZZZZ, and these methods must have been followed correctly.

2. The test must not be older than 2 years.

3. The test must be reviewed and accepted by the Administrator.

4. Either no process or equipment changes must have been made since the test was performed, or the permittee must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrates compliance despite process or equipment changes.

[40 C.F.R. §§63.6612 and 63.6630(a), and Tables 4 and 5 of 40 C.F.R. 63 Subpart ZZZZ](C-001)

4.3.2. During the initial performance test, the permittee must establish each applicable operating limitation in Table 1b of 40 C.F.R. 63, Subpart ZZZZ.
[40 C.F.R. § 63.6630(b)](C-001)

4.3.3. The permittee must conduct subsequent performance tests as specified in Table 3 of 40 C.F.R. 63, Subpart ZZZZ.

Table 3 of 40 C.F.R. 63, Subpart ZZZZ

For each . . .	Complying with the requirement to . . .	The permittee must . . .
4. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that are not limited use stationary RICE; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower >500 that are operated more than 24 hours per calendar year that are not limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs. or 3 years, whichever comes first.

[40 C.F.R. §63.6615, and Table 3 of 40 C.F.R. 63 Subpart ZZZZ] (C-001)

4.3.4. The permittee shall conduct performance tests in accordance with 40 C.F.R. §63.6620.
[40 C.F.R. §63.6620] (C-001)

4.4. Recordkeeping Requirements

4.4.1. The permittee must keep records in accordance with 40 C.F.R. § 63.6655, except for 40 C.F.R. §§63.6655(c) and (f),which do not apply to any of the engines, and 40 C.F.R. § 63.6655(e) which does not apply to engine C-001.
[40 C.F.R. §63.6655]

4.5. Reporting Requirements

4.5.1. The permittee must report each instance in which the applicable emission limitation or operating limitation in Tables 1b and 2d of 40 C.F.R. 63 Subpart ZZZZ were not met. These instances are deviations from the emission and operating limitations of 40 C.F.R. 63 Subpart ZZZZ. These deviations must be reported according to the requirements of 40 C.F.R. § 63.6650.
[40 C.F.R. §63.6640(b)](C-001, C-002, C-003, G-001)

4.5.2. The permittee must report each instance in which the applicable requirements in Table 8 of 40 C.F.R. 63 Subpart ZZZZ were not met.
[40 C.F.R. §63.6640(e)](C-001, C-002, C-003, G-001)

4.5.3. The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 C.F.R. §63.6645.
[40 C.F.R. §63.6630(c)] (C-001)

4.5.4. The permittee shall comply with the following reporting requirements:

a. The permittee must submit each applicable report in Table 7 of 40 C.F.R. Part 63, Subpart ZZZZ.

b. Unless the Administrator has approved a different schedule for submission of reports under 40 C.F.R. §63.10(a), the permittee must submit each report by the date in Table 7 of 40 C.F.R. Part 63, Subpart ZZZZ and according to the following requirements:

1. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 C.F.R. §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for the source in 40 C.F.R. §63.6595.

2. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for the affected source in 40 C.F.R. §63.6595.

3. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

4. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

5. For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 C.F.R. §70.6(a)(3)(iii)(A) or 40 C.F.R. §71.6 (a)(3)(iii)(A), the permittee may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs 4.5.4.b.1. through 4.5.4.b.4.

6. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.

7. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.

8. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

9. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

c. The Compliance report must contain the following information:

1. Company name and address.

2. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

3. Date of report and beginning and ending dates of the reporting period.

4. If the permittee had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 C.F.R. §63.6605(b), including actions taken to correct a malfunction.

5. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

6. If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

d. For each deviation from an emission or operating limitation that occurs for a stationary RICE where the permittee is using a CMS to comply with the emission or operating limitations in 40 C.F.R. Part 63, Subpart ZZZZ, the Compliance report must contain the information in paragraphs 4.5.4.c.1. through 4.5.4.c.4. and the following information:

1. The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

2. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

e. For each deviation from an emission or operating limitation occurring for a stationary RICE where the permittee is using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs 4.5.4.c.1. through 4.5.4.c.4.and the following information:

1. The date and time that each malfunction started and stopped.

2. The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

3. The date, time, and duration that each CMS was out-of-control, including the information in 40 C.F.R. §63.8(c)(8).

4. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

5. A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

6. A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

7. A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

8. An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

9. A brief description of the stationary RICE.

10. A brief description of the CMS.

11. The date of the latest CMS certification or audit.

12. A description of any changes in CMS, processes, or controls since the last reporting period.

f. Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 C.F.R. §70.6(a)(3)(iii)(A) or 40 C.F.R. §71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 C.F.R. §70.6(a)(3)(iii)(A) or 40 C.F.R. §71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in 40 C.F.R. Part 63, Subpart ZZZZ, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

[40 C.F.R. §63.6650] (C-001)

4.5.5. The permittee must comply with the following notification requirements:

a. The permittee must submit all applicable notifications in 40 C.F.R. §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h).

b. If the permittee is required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 C.F.R. §63.7(b)(1).

c. If the permittee is required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to 40 C.F.R. 63, Subpart ZZZZ, the permittee must submit a Notification of Compliance Status according to 40 C.F.R. §63.9(h)(2)(ii).

1. For each initial compliance demonstration required in Table 5 to 40 C.F.R. 63, Subpart ZZZZ that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

2. For each initial compliance demonstration required in Table 5 to 40 C.F.R. 63, Subpart ZZZZ that includes a performance test conducted according to the requirements in Table to 40 C.F.R. 63, Subpart ZZZZ, the permittee must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 C.F.R. §63.10(d)(2).

[40 C.F.R. §63.6645] (C-001)

4.5.6. For emergency situations which interrupt the critical supply of natural gas to the public, and which pose a life threatening circumstance to the customer, the permittee is allowed to temporarily replace failed engine(s) as long as all of the following conditions are met:

a. The replacement engine(s) is only allowed to operate until repair of the failed engine(s) is complete, but under no circumstance may the replacement engine(s) operate in excess of sixty (60) days;

b. Both the replacement engine(s) and the repaired failed engine(s) shall not operate at the same time with the exception of any necessary testing of the repaired engine(s) and this testing may not exceed five (5) hours;

c. Potential hourly emissions from the replacement engine(s) are less than or equal to the potential hourly emissions from the engine(s) being replaced;

d. Credible performance emission test data verifying the emission rates associated with the operation of the substitute engine shall be submitted to the Director within five (5) days;

e. The permittee must provide written notification to the Director within five (5) days of the replacement. This notification must contain:

i. Information to support the claim of life threatening circumstances to justify applicability of this emergency provision;

ii. Identification of the engine(s) being temporarily replaced;

iii. The design parameters of the replacement engine(s) including, but not limited to, the design horsepower and emission factors;

iv. Projected duration of the replacement engine(s); and

v. The appropriate certification by a responsible official.

[45CSR§30-12.7]

4.6. Compliance Plan

4.6.1. None

5.0 Source-Specific Requirements [Triethylene Glycol Dehydration (TEG) with Flare (FLARE), Heating Boiler (BLR), and Dehydration Boiler (DEHY) and emission point ID (FLARE, BLR, DEHY)]

5.1. Limitations and Standards

~~5.1.1. Potential facility wide HAP emissions shall be less than 10 TPY of any single HAP or 25 TPY of any combination of HAPs. For purposes of determining major or area source status at natural gas production facilities, the methods specified in 40 C.F.R. 63, Subpart HH shall be used~~
~~**[45CSR§30-12.7]**~~

~~5.1.2. The permittee has defined the facility as an area source of HAPs for existing source MACT applicability purposes. As a result the subject facility shall conduct monitoring, testing and reporting as specified below in order to provide adequate justification for maintaining area source status. These requirements are tailored to incorporate the methods specified in 40 C.F.R. 63, Subpart HH. Additionally, these requirements shall in no way restrict the permittee from conducting more frequent testing to quantify emission increases.~~
~~**[40CFR§63.10(b)(3); 40 C.F.R. 63, Subpart HH]**~~

~~5.1.3. The facility operates one triethylene glycol dehydrator (TEG). The TEG shall not exceed the below operating limitations:~~

~~a. The throughput of wet natural gas through the TEG facility shall not exceed 20.0 MMCFD;~~

~~b. The closed vent system shall be operated with no detectable emissions.~~

~~c. HAP emission shall be reduced by 95.0 percent or more.~~

~~d. The 1.25 MMBtu/hr heating boiler shall only be fired with natural gas.~~

~~**[45CSR§30-12.7.]**~~

5.1.1 The limitations set forth in this condition are hereby established to ensure that the permittee operates and maintains the glycol dehydration unit (TEG) with associated control device (FLARE) that limits hazardous air pollutant emissions to below the major source threshold value of HAPs as defined in 40 CFR §63.761 (Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities) as follows:

a. The maximum amount of wet natural gas processed through the dehydration unit shall not exceed 34 MMscf per day annual average.

b. The effluent generated by the flash tank of the dehydration unit shall be routed through a closed vent system to the fuel gas system or control device (FLARE) at all times while the dehydration unit is in operation.

c. The effluent generated by the still vent shall be routed through a closed vent system to the control device (FLARE) at all times while the dehydration unit is in operation.

d. The control device (FLARE) shall be operated and maintained in accordance with Condition 5.1.2.

e. The re-boiler shall be operated and maintained in accordance with Condition 5.1.3.

f. The closed vent system as required in this condition shall meet the following:

i. The system shall be constructed of hard piping.

ii. The system shall be constructed and maintained free of leaks. A leaking component is defined as a measured instrument reading greater than 500 ppm above background or by visual inspection.

iii. Detected leaks shall be repaired as soon as practicable with the first attempt at repair within 5 calendar days after detecting the leak. Repair shall be completed no later than 30 calendar days after the leak is detected.

[45CSR13, R13-3252, 4.1.1]

5.1.2 The permittee shall operate and maintain the control device (FLARE) for the dehydration unit in accordance with the following emission limitations and operating parameters.

a. Emissions of VOC from FLARE shall not exceed 2.36 pounds per hour. Annual VOC emissions from the FLARE shall not exceed 10.34 tons per year.

b. Total hazardous air pollutants (HAPs), which include BTEX, from the flare shall not exceed 0.55 pounds per hour. Annual HAP emissions from the FLARE shall not exceed 2.41 tons per year.

c. Actual average benzene emissions from the flare shall not be equal to or exceed 1.0 tons per year.
[40 CFR §63.764(e)(1)(ii); 45CSR34]

d. Compliance determination with the emission limits in items a, b, and c of this condition shall be made by using GYCALC™ 3.0 or higher.

e. Particulate matter emissions from the flare shall not exceed 0.01 pounds per hour. Compliance with this limit is satisfied by complying with requirements of Condition 5.1.2.g. This particulate matter emission limit shall demonstrate compliance with the less stringent hourly PM limit of 45CSR §6-4.1.
[45 CSR §6-4.1.]

f. The effluent routed to FLARE shall not contain hydrogen sulfide greater than 50 grains per 100 cubic feet of gas. Compliance with this limit is satisfied by limiting the hydrogen sulfide (H_2S) loading of the incoming natural gas to the facility to no greater than 100 ppmv.
[45 CSR §10-5.1.]

g. The permittee shall operate and maintain FLARE in a manner that minimizes VOC and volatile HAP emissions. Such operation of the control device shall constitute the following:

i. FLARE shall not exhibit any visible emissions, except for periods not to exceed a total of 5 minutes during two consecutive hours. Compliance with this streamlined limit shall demonstrate compliance with the 45CSR§6-4.3 20% opacity limit.
[45 CSR §6-4.3.]

ii. The pilot flame for FLARE shall be lit at all times when the dehydration unit is operating. The fuel source for the pilot light shall be either natural gas, flash tank off gas, or a combination of the two fuels.

iii. The flare shall not be operated with an exit velocity at the tip greater than 60 feet per second.

iv. The net heating value of the effluent routed to the flare shall not be less than 200 Btu per standard cubic feet. Compliance with this requirement is satisfied by introducing fuel gas to the still vent effluent at a rate of no less than 500 scfh or the rate measured during the recent flare performance demonstration.

[45CSR13, R13-3252, 4.1.2]

5.1.3. The permittee shall operate and maintain the reboiler (DEHY) for the dehydration unit in accordance with the following emission limitations and operating parameters.

a. Visible emissions from the emission point DEHY shall not exceed 10% opacity on a 6-minute block average. Compliance with this requirement is satisfied by complying with the fuel type restriction in Condition 5.1.3.b.
[45 CSR §2-3.1]

b. The reboiler shall only be fueled with fuel gas, which can be either flash gas from the TEG Flash Tank, natural gas, or any mixture of these two fuels.

[45CSR13, R13-3252, 4.1.3]

5.1.4. The following provisions of Part 63 Subpart HH *National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities* are applicable to the facility:

~~*§ 63.760 Applicability and designation of affected source*~~
~~The owner or operator of an affected area source that is not located in an Urban 1 county, as defined in §63.761, the construction or reconstruction of which commences before July 8, 2005, shall achieve compliance with the provisions of this subpart no later than the dates specified in paragraphs (f)(5)(i) or (ii) of this section, except as provided for in §63.6(i) "Extension of Compliance with Emission Standards".~~

~~(f)(5)(ii) If the affected area source is not located within any UA plus offset and UC boundary, as defined in §63.761, the compliance date is January 5, 2009.~~

~~**[40CFR§63.760(f)(5)(ii)] (FLARE)**~~

§ 63.764 General standards.
(a) Table 2 of the Part 63 Subpart HH specifies the provisions of subpart A (General Provisions) of Part 63 that apply and those that do not apply to owners and operators of affected sources subject to this subpart.

(b) All reports required under this subpart shall be sent to the Administrator at the appropriate address listed in §63.13. Reports may be submitted on electronic media.

(d) Except as specified in paragraph (e)(1) of this requirement, the owner or operator of an affected source located at an existing or new area source of HAP emissions shall comply with the applicable standards specified in paragraph (d) of this section.

(2) Each owner or operator of an area source not located in a UA plus offset and UC boundary (as defined in §63.761) shall comply with paragraphs (d)(2)(i) through (iii) of this requirement.

(i) Determine the optimum glycol circulation rate using the following equation:

$$L_{OPT} = 1.15 * 3.0 \frac{\text{gal TEG}}{\text{lb } H_2O} * \left(\frac{F * (I - O)}{24 \text{ hr/day}} \right)$$

Where:

L_{OPT}= Optimal circulation rate, gal/hr.

F = Gas flowrate (MMSCF/D).

I = Inlet water content (lb/MMSCF).

O = Outlet water content (lb/MMSCF).

3.0 = The industry accepted rule of thumb for a TEG-to water ratio (gal TEG/lb H_2O).

1.15 = Adjustment factor included for a margin of safety.

(ii) Operate the TEG dehydration unit such that the actual glycol circulation rate does not exceed the optimum glycol circulation rate determined in accordance with paragraph (d)(2)(i) of this section. If the TEG dehydration unit is unable to meet the sales gas specification for moisture content using the glycol circulation rate determined in accordance with paragraph (d)(2)(i), the owner or operator must calculate an alternate circulation rate using GRI–GLYCalc™ , Version 3.0 or higher. The owner or operator must document why the TEG dehydration unit must be operated using the alternate circulation rate and submit this documentation with the initial notification in accordance with §63.775(c)(7).

(iii) Maintain a record of the determination specified in paragraph (d)(2)(ii) in accordance with the requirements in §63.774(f) and submit the Initial Notification in accordance with the requirements in §63.775(c)(7). If operating conditions change and a modification to the optimum glycol circulation rate is required, the owner or operator shall prepare a new determination in accordance with paragraph (d)(2)(i) or (ii) of this section and submit the information specified under §63.775(c)(7)(ii) through (v).

(e) *Exemptions.* (1) The owner or operator is exempt from the requirements of paragraph (c)(1) and (d) of this section if the criteria listed in paragraph (e)(1)(i) or (ii) of this section are met, except that the records of the determination of these criteria must be maintained as required in §63.774(d)(1).

(i) The actual annual average flowrate of natural gas to the glycol dehydration unit is less than 85 thousand standard cubic meters per day, as determined by the procedures specified in §63.772(b)(1) of this subpart; or

(ii) The actual average emissions of benzene from the glycol dehydration unit process vent to the atmosphere are less than 0.90 megagram per year, as determined by the procedures specified in §63.772(b)(2) of this subpart.

[45CSR34, 40CFR§63.764(a), (b), (d), (e)](FLARE)

~~5.1.5. If the annual emissions of benzene from the dehydration unit ever equals or exceeds 0.90 megagram per year (1 tpy) as calculated per §63.772(b)(2) (requirement 5.3.5), the permittee shall comply with the section d(2)(i) through (iii) of §63.764 (requirement 5.1.4).~~
~~**[45CSR§30-5.1.c](FLARE)**~~

~~***The following requirements for flares make the flare federally and practically enforceable. If a flare is being used to provide the natural gas source with synthetic minor status or reduce the potential HAPs to below major source levels, the one ton of benzene exemption for MACT, or even if the source is minor without the flare, but would like to reduce their PTE by the use of a flare, the following control device requirements shall be used.***~~

5.1.6. The flare (FLARE) shall be designed and operated in accordance with the following:

(a) Flares shall be steam-assisted, air-assisted, or non-assisted.

(b) Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. *This streamlined limit of no visible emissions will ensure compliance with 45CSR§6-4.3.* During the exception period when visible emissions are allowed, the visible emissions shall not exceed 20% opacity except for periods of start-up as outlined in 45CSR§6-4.4. (i.e., less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up).

(c) Flares shall be operated at all times when emissions may be vented to them, except during SSM (Startup, Shutdown, Malfunctions) events.

(d) Flares shall be operated with a flame present at all times.

(e) Flares shall be used only with the net heating value of the gas being combusted at 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted at 7.45 MJ/scm (200 Btu/scf) or greater if the flares is non-assisted. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

Where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of off gas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C.

K = Constant = 1.740×10^{-7} *[1/ppmv][g-mole/scm][MJ/kcal],* where the standard temperature for (g-mole/scm) is 20 °C.

C_i = Concentration of sample component i in ppmv on a wet basis, which may be measured for organics by 40 C.F.R. Part 60 Appendix A, Test Method 18, but is not required to be measured using Method 18 (unless designated by the Director).

H_i = Net heat of combustion of sample component i, kcal/g-mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 if published values are not available or cannot be calculated.

N = Number of sample components.

(f) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity less than 18.3 m/sec (60 ft/sec). The actual exit velocity of a flare shall be determined by dividing by the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), by the unobstructed (free) cross-sectional area of the flare tip, which may be determined by 40 C.F.R. Part 60 Appendix A, Test Method 2, 2A, 2C, or 2D in to, as appropriate, but is not

required to be determined using these Methods (unless designated by the Director).

(g) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in Section 5.1.6.f, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(h) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in Section 5.1.6.f, less than the velocity V_{max}, as determined by the method specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity, V_{max}, for flares complying with this paragraph shall be determined by the following equation:

$$\mathbf{Log_{10}(V_{max})=(H_T+28.8)/31.7}$$

Where:

V_{max} = Maximum permitted velocity, m/sec.
28.8 = Constant.
31.7 = Constant.
H_T = The net heating value as determined in Section 5.1.6.e.

[45CSR§30-12.7, 45CSR§§6-4.3 and 4.4](FLARE)

5.1.7. Flares are not required to conduct a flare compliance assessment for concentration of sample (i.e. 40 C.F.R. Part 60 Appendix A, Method 18) and tip velocity (i.e. 40 C.F.R. Part 60 Appendix A, Method 2), until such time as the Director requests a flare compliance assessment to be conducted in accordance with section 5.3.3, but the permittee is required to conduct a flare design evaluation in accordance with section 5.3.2.
[45CSR§30-5.1.c.](FLARE)

5.1.8. No person shall cause, suffer, allow or permit particulate matter to be discharged from any incinerator into the open air in excess of the quantity determined by use of the following formula:

Emissions (lb/hr) = F x Incinerator Capacity (tons/hr)

Where, the factor, F, is as indicated in Table I below:

Table I: Factor, F, for Determining Maximum Allowable Particulate Emissions

	Incinerator Capacity	Factor F
A.	Less than 15,000 lbs/hr	5.43
B.	15,000 lbs/hr or greater	2.72

Calculations for PM Emissions

(5.43) * (564 LB / hr) * (ton / 2000 LB) = 1.5339 LB/hr

Thus, the particulate matter discharged from open flare shall not exceed 1.5339 LB/hr.

[45CSR§6-4.1.](FLARE)

5.1.95. No person shall cause, suffer, allow or permit emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§10-4.1.a though 45CSR§10-4.1.e.
[45CSR§10-4.1.]

~~5.1.10. No person shall cause, suffer, allow or permit the combustion of any refinery process gas stream or any other process gas stream that contains hydrogen sulfide in a concentration greater than 50 grains per 100 cubic feet of gas except in the case of a person operating in compliance with an emission control and mitigation plan approved by the Director and USEPA. In certain cases very small units may be considered exempt from this requirement if, in the opinion of the Director, compliance would be economically unreasonable and if the contribution of the unit to the surrounding air quality could be considered negligible.~~
~~[45CSR§10-5.1]~~

5.1.116. No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from the flare which are large enough to be individually distinguished in the open air.
[45CSR§6-4.5]

5.1.127. The flare, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
[45CSR§6-4.6.]

5.1.138. The heating and dehydration boilers, on an individual basis, shall not cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1](BLR and DEHY)

5.1.9 **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11., 45CSR13, R13-3252, 4.1.4]

5.2. Monitoring Requirements

5.2.1. In order to demonstrate compliance with the continuous flame requirements of Section 5.1.~~6 (d)~~2.g.ii the permittee shall monitor the presence or absence of a flare pilot flame using a thermocouple or any other equivalent device. Pilot flame absence while the dehydration reboiler is in operation indicates an excursion.

All manufacture's recommendations regarding periodic testing/checks for the proper installation and operation of the device shall be followed.

The device that detects the presence of a flame shall be calibrated, maintained, and operated in accordance with the manufacture's specifications.
[45CSR§30-5.1.c., 40 C.F.R. § 64.6 (c)]

5.2.2. ~~**Closed vent system.** To demonstrate compliance with Section 5.1.3.b, the permittee shall conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; or broken or missing caps or other closure devices.~~

~~Records shall include the date and time of visual inspection and shall specify any defect(s) found and the corrective measures taken.~~
~~[45CSR§30-5.1.c.]~~

For the purposes of demonstrating compliance with the requirements of the closed vent system in Condition 5.1.1., the permittee shall conduct the following:

a. Conduct an initial visual, olfactory, and auditory inspection for defects that could result in air emissions within 180 days after issuance of this permit. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; liquid leaks; or broken or missing caps or other closure devices.

b. After the initial, subsequent annual visual, olfactory, and auditory inspections shall be conducted for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; liquid leaks; or broken or missing caps or other closure devices.

c. Detected leaks shall be repaired in accordance with the timing stated in Condition 5.1.1.f.iii.

d. Records of such inspections shall be maintained in accordance with 3.4.2.

e. The use of the procedures listed as Alternative Methods to Method 21 (i.e. soapy water) to determine a leak or a leak has been repaired is acceptable.

[45CSR13, R13-3252, 4.2.4]

5.2.3. ~~Compliance with the 45CSR§6-4.1 hourly PM emission limit (permit condition 5.1.8) shall be determined based on the gas and/or liquid throughput and gas usage limitation. If a monitoring timeframe is not already established and there are hourly emissions, records indicating the monthly emissions with operating records shall be available for a period of no less than five (5) years.~~
~~[45CSR§30-5.1.c.]~~

The permittee shall monitor the dehydration unit for equipment leaks in accordance with the following requirements:

a. Conduct an initial visual, olfactory, and auditory inspection for defects that could result in air emissions within 180 days after issuance of this permit.

b. After the completion of the initial inspection, subsequent inspections shall be conducted in accordance with the following:

i. Visual inspection of the glycol circulating pumps for visual indicators of leaking seals once per month.

ii. Visual inspection of the pressure relief device on a monthly basis.

iii. Conduct a visual, olfactory, and auditory inspection for defects that could result in air emissions within 12 months of the previous inspection of the dehydration unit.

c. Detected leaks shall be repaired in accordance with the timing stated in Condition 5.1.1.f.iii.

d. Records of such inspections and any repairs made shall be maintained in accordance with Condition 3.4.2.

e. The use of the procedures listed as Alternative Methods to Method 21 (i.e. soapy water) to determine a leak or a leak has been repaired is acceptable.

[45CSR13, R13-3252, 4.2.5]

~~5.2.4. Compliance with the 45CSR§6-4.1 hourly PM emission limit (permit condition 5.1.8) from the flare shall be determined by using the emission factors listed in Section 1.4-2 for Natural Gas Combustion of the 5th edition of USEPA's AP-42 and the design heat input of the flare.~~

~~**[45CSR§30-5.1.c.]**~~

5.2.~~5~~4. In order to demonstrate compliance with the area source status, claimed within 5.1.~~2,~~ 1, 5.1.2 and 5.1.4~~, 5.1.5,~~ as well as the 1 ton per year benzene exemption provided under 5.1.4(e)(1)(ii), using GRI-GLYCalc V3 or higher, the dehydration system must be accurately defined by monitoring and recording actual annual average operating parameters associated with the dehydration system. These parameters shall be measured at least quarterly, with the exception of wet gas composition, in order to define annual average values or, if monitoring is not practical, some parameters may be assigned default values in accordance with the stipulations listed below. Annual average operating parameter, shall be interpreted as the average result of periodic monitoring recorded a number of times throughout the calendar year, which is sufficient enough to reflect annual variation. Therefore, this term is operating parameter and site dependent.
The WV Division of Air Quality requires the following actual operating parameters be measured or assumed to equal the default values listed below in order to satisfy this monitoring requirement when using the Gas Analysis and Process Data, GLYCalc emission modeling method:

Note: if you are measuring and using actual wet or dry gas water content then you are also required to measure the lean glycol recirculation rate rather than using the default value.

- Natural Gas Flowrate:
  - number of days operated per month,
  - monthly throughput (MMscf/month),
  - annual daily average (MMscf/day), and
  - maximum design capacity (MMscf/day)
- Absorber temperature and pressure
- Lean glycol circulation rate
- Glycol pump type
- Flash tank temperature and pressure, if applicable
- Stripping Gas flow rate, if applicable
- Wet gas composition (upstream of the absorber – dehydration column) sampled in accordance with GPA method 2166 and analyzed consistent with GPA extended method 2286 as well as the procedures presented in the GRI-GLYCalc Technical Reference User Manual and Handbook V4.
- Wet gas water content (lbs H_2O/MMscf)
- Dry gas water content (lbs H_2O/MMscf) at a point directly after exiting the dehydration column and before any additional separation points

The following operating parameter**(s)** may be assigned default values when using GRI-GLYCalc:

- Dry Gas water content can be assumed to be equivalent to pipeline quality at 7 lb H_2O / MMscf.
- Wet gas water content can be assumed to be saturated
- Lean glycol water content if not directly measured may use the default value of 1.5 % water as established by GRI.
- Lean glycol circulation rate may be estimated using the recirculation ratio of 3 gal TEG / lb H_2O removed.

[45CSR§30-5.1.c.](FLARE)

5.2.~~6~~5. **Proper Maintenance** – At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 C.F.R §64.7(b), 45CSR§30-5.1.c.]

5.2.~~7~~6. **Continued Operation** – Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for the purposes of 40 C.F.R. Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failure that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 C.F.R. §64.7(c), 45CSR§30-5.1.c]

5.2.~~8~~7. **Documentation of Need for Improved Monitoring** – After approval of monitoring under 40 C.F.R. Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an identification of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 C.F.R. §64.7(e), 45CSR§30-5.1.c]

5.2.~~9~~8. **Quality Improvement Plan (QIP)** – Based on the results of a determination made under 40 C.F.R. §64.7(d)(2) (permit condition 5.2.~~10~~9.b), the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 C.F.R. §§64.8(b) through (e). Refer to permit condition 5.5.~~6~~3.iii for the reporting required when a QIP is implemented.
[40 C.F.R. §64.8, 45CSR§30-5.1.c]

5.2.~~10~~9. Response to Excursions or Exceedances:

a. Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emissions limitation or standard, as applicable.

b. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on the information available, which may include but is not limited to, monitoring results, review of the operation and maintenance procedures and records, and inspection of the control device, associate capture system, and the process.

[40 C.F.R. §64.7(d), 45CSR§30-5.1.c]

5.2.10 The permittee shall monitor and record the following parameters for the purpose of demonstrating compliance with Conditions 5.1.1., 5.1.2., and 5.1.3.:

a. The throughput of wet natural gas processed through the dehydration unit on a monthly basis, days the dehydration unit operated, and annual average natural gas flowrate.

b. Determine actual annual average natural gas throughput (in terms of natural gas flowrate to the glycol dehydration unit per day) by converting the annual natural gas flowrate to a daily average by dividing the annual flowrate by the number of days per year the glycol dehydration unit processed natural gas.

c. Identify any periods there was no flame present for the pilot of the flare when the dehydration unit was in operation.

d. Monitor daily and record the amount of fuel gas (supplemental fuel) introduced to the flare monthly. If such readings includes the fuel gas for the flare pilot light, then compliance with limitation of Condition 5.1.2.g.iv. is satisfied if the reading is at or exceeds the flow rate stipulated in Condition 5.1.2.g.iv. by 50 scfh.

e. Determination of the actual average benzene emissions from the dehydration unit shall be made using the model GRI-GLYCalc™, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1).
[40 CFR §63.772(b)(2)(i) & 63.774(d)(1)(ii), 45CSR 34]

f. Records of such monitoring shall be maintained in accordance with Condition 3.4.2.
[45CSR13, R13-3252, 4.2.1]

5.3. Testing Requirements

5.3.1. ~~In order to demonstrate compliance with the flare opacity requirements of Section 5.1.6 (b) the permittee shall conduct a 40 C.F.R. Part 60 Appendix A, Method 22 opacity test for at least two hours. This test shall demonstrate no visible emissions are observed for more than a total of 5 minutes during any 2 consecutive hour period using 40 C.F.R. Part 60 Appendix A, Method 22. The permittee shall conduct this test within thirty (30) days of permit issuance or initial startup whichever is later and a second opacity test within six months from the time the permit expires. The visible emission checks shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 C.F.R. Part 60 Appendix A, Method 22 or from the lecture portion of 40 C.F.R. Part 60 Appendix A, Method 9 certification course.~~
~~**[45CSR§30-5.1.c.] (FLARE)**~~

For the purpose of demonstrating proper operation of the flare, the permittee shall conduct a visible emission observation using Section 11 of Method 22 for one hour once every calendar quarter in which the dehydration unit operates with the first observation being conducted within 90 days after issuance of this permit and subsequent observations conducted once every calendar quarter thereafter. If during the first 30 minutes of the observation there were no visible emissions observed, the permittee may stop the observation.

If at the end of the observation and visible emission were observed for more than 2.5 minutes, then the permittee shall follow manufacturer's repair instructions, if available or best combustion engineering practice as outline in the unit inspection and maintenance plan. To return the flare to compliant operation, the permittee shall repeat the visible emission observation. Records of such monitoring and repair activities shall be maintained in accordance with Condition 3.4.2.
[45CSR13, R13-3252, 4.2.3]

~~5.3.2 In order to demonstrate compliance with the flare design criteria requirements of Section 5.1.6, the permittee shall conduct a flare design evaluation demonstrating compliance with the criteria set forth by Section 5.1.6. The flare design evaluation shall include, net heat value calculations, exit (tip) velocity calculations, all supporting concentration calculations, and other related information requested. The permittee may elect to demonstrate compliance with the flare design criteria requirements of section 5.1.6 by complying with the compliance assessment testing requirements of Section 5.3.3.~~
~~[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]~~

5.3.~~3~~2 ~~The Director may require the permittee to conduct a flare compliance assessment to demonstrate compliance with the flare requirements of Section 5.1.6 and the flare design evaluation. This compliance assessment testing shall be conducted in accordance with 40 C.F.R. Part 60 Appendix A, Test Method 18 for organics and 40 C.F.R. Part 60 Appendix A, Test Method 2, 2A, 2C, or 2D, as appropriate, or other equivalent testing approved in writing by the Director. Also, 40 C.F.R. Part 60 Appendix A, Test Method 18 may require the permittee to conduct 40 C.F.R. Part 60 Appendix A, Test Method 4 in conjunction with 40 C.F.R. Part 60 Appendix A, Test Method 18.~~
~~[45CSR§30-5.1.c. and 40 C.F.R. § 64.6 (c)]~~

If the permittee elects to reestablish the minimum amount of fuel gas (supplemental fuel) as listed in Condition 5.1.2.g.iv., the permittee shall conduct a flare compliance assessment to demonstrate compliance with the flare requirements of Condition 5.1.2. This compliance assessment testing shall be conducted in accordance with Test Method 18 for organics and Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR Part 60, as appropriate, and in accordance with Condition 3.3.1. of this permit. Also, Test Method 18 may require the permittee to conduct Test Method 4 in conjunction with Test Method 18. During such testing, the dehydration unit shall be operating that would yield the lowest heat content from the still vent. Records of such assessment shall be maintained in accordance with Condition 3.4.2.
[45CSR13, R13-3252, 4.3.1]

5.3.~~4~~3 Within the third year of this permit term, the permittee shall determine the composition of the wet natural gas by sampling in accordance with GPA Method 2166 and analyzing according to extended GPA Method 2286 analysis as specified in the GRI-GLYCalc V3 or higher Technical Reference User Manual and Handbook. As specified in the handbook, the permittee shall sample the wet gas stream at a location prior to the glycol dehydration contactor column, but after any type of separation device, in accordance with GPA method 2166. The permittee may utilize other equivalent methods provided they are approved in advance by DAQ as part of a testing protocol. If alternative methods are proposed, a test protocol shall be submitted for approval no later than 60 days before the scheduled test date.
[45CSR§30-5.1.c](FLARE)

5.3.~~5~~4 The following testing and compliance provisions of Part 63 Subpart HH *National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities* are applicable to the facility:

§ 63.772 Test methods, compliance procedures, and compliance demonstrations.

(b) Determination of glycol dehydration unit flowrate or benzene emissions. The procedures of this paragraph shall be used by an owner or operator to determine glycol dehydration unit natural gas flowrate or benzene emissions to meet the criteria for an exemption from control requirements under §63.764(e)(1) (requirement 5.1.4).

(2) The determination of actual average benzene emissions from a glycol dehydration unit shall be made using the procedures of either paragraph (b)(2)(i) or (b)(2)(ii) of this requirement. Emissions shall be determined either uncontrolled, or with federally enforceable controls in place.

(i) The owner or operator shall determine actual average benzene emissions using the model GRI-GLYCalc™ , Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit.

[45CSR34, 40CFR§63.772 (b)(2)(i)](FLARE)

5.3.5 For the purpose of demonstrating compliance with Condition 5.1.2.f., the permittee shall conduct gas sampling at a point that is representative of the incoming natural gas to the facility and analyzing the Sample to determine the hydrogen sulfide content of the sample. At a minimum, such sampling and analysis shall be conducted once per calendar year. Records of such monitoring shall be maintained in accordance with Condition 3.4.2. of this permit.
[45 CSR §10-8.3.a., 45CSR13, R13-3252, 4.2.2]

5.4. Recordkeeping Requirements

5.4.1. For the purpose of demonstrating compliance with Sections 5.1.2.g.ii~~6(d)~~ and 5.2.1, the permittee shall maintain records of the times and duration of all periods which the pilot flame was absent while the dehydration reboiler was in operation.
[45CSR§30-5.1.c., 40 C.F.R. § 64.6 (c)](FLARE)

~~5.4.2. For the purpose of demonstrating compliance with Sections 5.1.6 and 5.3.2, the permittee shall maintain a record of the flare design evaluation. The flare design evaluation shall include, net heat value calculations, exit (tip) velocity calculations, all supporting concentration calculations, and other information requested.~~
~~[45CSR§30-5.1.c.]~~

~~5.4.3. For the purpose of demonstrating compliance with the requirements set forth in Sections 5.1.6 and 5.3.3, the permittee shall maintain records of testing conducted in accordance with 5.3.3.~~
~~[45CSR§30-5.1.c., 40 C.F.R. § 64.6 (c)](FLARE)~~

~~5.4.4. The permittee shall document and maintain the corresponding records specified by the on-going monitoring requirements of 5.2 and testing requirements of 5.3.~~
~~[45CSR§30-5.1.c.](FLARE)~~

~~5.4.5. For the purpose of demonstrating compliance with section 5.1.6. (b), the permittee shall maintain records of the visible emission opacity tests conducted per Section 5.3.1.~~
~~[45CSR§30-5.1.c.](FLARE)~~

5.4.~~6~~2. For the purpose of documenting compliance with the emission limitations, HAP major source thresholds, as well as the 1 ton per year benzene exemption, the permitee shall maintain records of all monitoring data, wet gas sampling, and annual GLYCalc emission estimates.
[45CSR§30-5.1.c](FLARE)

~~5.4.7. The permittee shall maintain a record of the wet natural gas throughput through the dehydration system to demonstrate compliance with the natural gas throughput limit.~~
~~**[45CSR§30-5.1.c., 40 C.F.R. § 64.6 (c)]**~~

5.4.~~8~~3. **General recordkeeping requirements for CAM**:

(1) The owner or operator shall comply with the recordkeeping requirements of Sections 3.4.1 and 3.4.2. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. § 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 C.F.R. §64.9 (b)]

5.4.~~9~~4. An owner or operator of a glycol dehydration unit that meets the exemption criteria in 40 C.F.R. §63.764(e)(1)(ii) shall maintain the records of the actual average benzene emissions (in terms of benzene emission per year) as determined in accordance with §63.772(b)(2).
[40 C.F.R. §63.774(d)(1);45CSR 34](FLARE)

5.4.5 **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13, R13-3252, 4.4.2]

5.4.6. The permittee shall maintain records of the analysis that is used to indicate compliance is in accordance with items a. b. and g.iii. of Condition 5.1.2. Such records shall include the source of data used in the analysis and be maintained in accordance with Condition 3.4.2.
[45CSR34, 40 CFR 63.774(d)(2)(ii), 45CSR13, R13-3252, 4.4.4]

5.5. Reporting Requirements

5.5.1. Any and all malfunctions of the dehydrator flare shall be documented in writing. The following information must be documented for each malfunction:

a. The equipment involved in the malfunction and the associated cause.

b. Steps taken to correct the malfunction.

c. The steps taken to minimize the emissions during the malfunction.

d. The duration of the malfunction.

e. The increase in emissions during the malfunction.

f. Steps taken to prevent a similar malfunction in the future.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

These records shall be maintained on site for the duration of the operation.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.7 (d), 45CSR13, R13-3252, 4.4.3]

~~5.5.2. For demonstrating compliance with section 5.3.3, the permittee shall submit a testing protocol thirty (30) days prior to testing and shall submit a notification of the testing date fifteen (15) days prior to testing. Also, the permittee shall submit the testing results within sixty (60) days of testing and provide all supporting calculations and testing data.~~
~~[45CSR§30-5.1.c.]~~

~~5.5.3. Any deviation(s) of the allowable visible emission requirement for any emission source discovered during observations using 40 C.F.R. Part 60, Appendix A, Method 9 or 22 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.~~
~~[45CSR§30-5.1.c.]~~

~~5.5.4. Any deviation(s) of the flare design and operation criteria in Section 5.1.6 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days.~~
~~[45CSR§30-5.1.c.]~~

5.5.~~5~~2. The permittee shall submit by March 31st of the following year, an emission summary for the dehydration unit (TEG), which incorporates the wet gas testing results required by 5.3.~~4~~3. The permittee shall also supply a copy of the most recent report within the facility's subsequent Title V renewal application. These reports shall include an actual annual average emission estimate for the calendar year of the sample, modeled using GLYCalc V3 or higher software, which incorporates site specific parameters measured in accordance with 5.2.~~5~~4. The permittee shall also supply all supporting documentation where site specific operating parameters are tabulated to define the annual average values. The report shall incorporate a copy of the lab analysis obtained from the wet gas testing as well as a description of how and where the sample was taken. The report shall include a reference to all sampling and analytical methods utilized. Additionally, the permittee shall identify where the compressor station is located with respect to a custody transfer point, which is referenced within 40 C.F.R. 63, subpart HH as the point where the gas enters into a natural gas transmission and/or storage pipeline. This report shall be signed by a responsible official upon submittal.
[45CSR§30-5.1.c.](FLARE)

5.5.~~6~~3. **General reporting requirements** for CAM. A report for monitoring under 40 C.F.R. Part 64 shall include, at a minimum, the information required in Sections 3.5.6 and 3.5.8 and the following information as applicable:

(i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(iii) A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. § 64.9 (a) (2)]

5.5.4 The permittee shall report to the Director any leaks of the closed vent system that were not repaired in accordance with Condition 5.1.1. Such report shall be included with the facility's semiannual or annual compliance report as required in 45 CSR 30.
[45CSR13, R13-3252, 4.5.1]

5.6. Compliance Plan

5.6.1. None

5.7. CAM Plan Summary of Requirements for Flare (FLARE)

			Indicator No. 1
I.	**Indicator**		Presence of Flame (permit condition 5.1.2.g.ii~~6.d~~.)
	Monitoring Approach		Use of thermocouple, infrared device, or equivalent (permit condition 5.2.1.).
II.	**Indicator Range or Designated Condition**		Indicator provides data regarding presence or absence of flame.
III.	**Performance Criteria**		A thermocouple, infrared detector, pilot eye, or equivalent device will be installed to continuously monitor the presence of a pilot flame (permit condition 5.2.1.).
	A.	**Data Representativeness**	
	B.	**Verification of Operational Status**	All manufacturer's recommendations regarding periodic testing/checks for the proper installation and operation of the pilot eye device will be followed (permit condition 5.2.1.).
	C.	**QA/QC Practices and Criteria**	For the device that detects the presence of a flame, calibration, maintenance and operation will be conducted in accordance with manufacturer's specifications (permit condition 5.2.1.).
	D.	**Monitoring Frequency**	Continuously
		Data Collection Procedures	Records of all flame outs or loss of pilot eye, along with any applicable corrective actions will be documented and maintained (permit condition 5.4.~~8~~3 and 5.5.1.).
		Data averaging periods	No averaging periods